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In conclusion, Mr. Everett expressed the hope, that the members of the Academy might eventually witness such accessions to the astronomical science of the country, from the observations made by this admirable instrument, as would be considered by them a satisfactory equivalent for so large an appropriation of the Academy's funds.

Two hundred and ninety-eighth Meeting.

October 5, 1847. — MONTHLY MEETING.

The PRESIDENT in the chair.

The Corresponding Secretary presented a communication from Professor Henry, Secretary of the Smithsonian Institution, in reference to the organization of that institution; which, on motion of the Vice-President, was referred to a committee, consisting of Mr. Everett, Prof. Gray, Prof. Agassiz, Prof. Peirce, Prof. Longfellow, and Prof. Sparks.

Mr. Bond communicated the following

OBSERVATIONS ON THE PLANET NEPTUNE, NEAR ITS QUADRATURE.

Made at Cambridge Observatory, Long. $4^{h.}$ $44^{m.}$ $32^{s.}$.

Cambridge M.S.T. of Observation.	Planet follows No. 7740 B. A. C.	Planet south of No. 7740 in Dec.	Mean Position of Star, Jan. 1, 1847.	No. of Comp.
1847. d. h. m.	m. s.	′ ″	h m. s.	
May 14 15 44	6 08.67	5 04.9	A. R. 22 04 07.53	4
19 15 39	6 19.30	4 17.3	Dec. —11° 49′ 04″.4	1
20 15 42	6 20.55	4 12.2		6
28 15 44	6 29.17	3 37.1		5

OBSERVATIONS ON THE PLANET NEPTUNE, MADE WHEN NEAR ITS OPPOSITION.

Cambridge M.S.T. of Observation.	App. A. R. of Neptune.	Obs. — Eph.	App. Declination of Neptune.	Obs. — Eph.	Mean position of 38 Aquarii, Jan. 1, 1847.	No. of Comp.
1847. d. h. m.	h. m. s.	s.	° ′ ″	″	h. m. s.	
Aug. 18 11 13	22 05 41.75	—0.03	—12 21 42.9	+0.2	A. R. 22 02 26.57	4
" 20 10 11	22 05 29.36	—0.13	—12 22 51.2	—0.5	Dec. —12° 18′ 52″.0	8
" 21 10 32	22 05 22.89	—0.25	—12 23 26.5	— 0.7	38 Aquarii is No.	10
" 23 10 26	22 05 10.40	—0.22	—12 24 37.6	+0.6	7722 B. A. C.	6

The columns headed "Observed — Ephemeris" contain a comparison with Mr. Adams's Ephemeris in the June number of the Notices of the London Astronomical Society.

Mr. Bond also presented the subjoined

OBSERVATIONS ON MAUVAIS'S COMET OF JULY 4TH, 1847.

Cambridge Mean Solar Time.					Comet's A. R.	Comet's Dec. N.	Star of Comparison. A. R.	Star of Comparison. Dec. N.	No. of Comp.	
1847.	d.	h.	m.	s.	h. m. s.	° ′ ″	h. m. s.	° ′ ″		
July	14	11	45		16 20	85 14				
	20	10	26		13 59 26.7	80 53 00	13 50 33.73	80 40 41.2	4	Hist.Cel.p. 394.
	23	10	46	54	13 34 00.8	78 14 03	13 42 04.80	78 49 50.0	4	B. A. C. 4614.
	24	10	06	30	13 28 35.1	77 22 27	13 32 41.03	77 19 41.6	5	Arg. Zone, 194.
	27	10	49	10	13 15 55.5	74 41 23	13 00 05.37	73 50 40.5	6	Gr. 1960.
	31	10	13	12	13 05 59.4	71 14 11	12 53 43.30	71 25 22.0	3	Arg. Zone, 200.
Aug.	3	10	32	48	13 01 15.4	68 43 14	12 26 55.11	70 37 55.7	2	5 Draconis.
	10	9	11	00	12 55 48.2	63 12 43	13 00 19.88	62 51 47.9	3	B. A. C. 4392.
Sept.	6	9	15	01	12 57 09.7	46 18 24	12 58 58.44	43 54 44.6	7	B. A. C. 4389.
Oct.	11	7	07	30	13 09 46.2	32 35 45	13 11 02.75	32 26 23.1	3	Bess. Zone, 408.

"*July* 14*th*. The comet was first seen at $11^{h.}$ $45^{m.}$ P. M.; but after watching its position for some time, we could detect no indication of motion relatively to the neighbouring stars, so that it was not recognized as a comet until six days after. Its position, as given above, was taken from the circles of the five-foot equatorial.

"*July* 20*th*. The comet was observed to-night with the five-foot equatorial, using the annular micrometer for the comparisons. It disappears sharply behind the ring, with almost as much certainty as a star; indicating a sudden condensation of light at the centre. This was afterwards confirmed, on examination with the great refractor recently mounted in the dome of the Observatory. With the full aperture of fifteen inches, a very minute stellar point is visible in the centre of the comet, with a sparkling light, easily distinguishable from the diffused nebulosity which surrounds it.

"*July* 23*d*. The observations were made this evening with the great equatorial, by differentiating with the hour and declination circles. In high declinations this method allows the comparisons to be oftener repeated than is otherwise practicable. In declination the comparisons have a better mutual agreement than we have been able to obtain when using the annular micrometer.

"*July* 24*th*. The comet does not sensibly increase in brightness. The stellar point is visible through strong moonlight.

"*Sept.* 3*d*. The comet still shows a star-like nucleus. A faint tail is visible, of six or eight minutes in length.

"*October* 11*th*. The differences of right ascension this evening are somewhat uncertain, the altitude being too low for accurate observations.

"It seems necessary to remark, that the above places of the comet given by the great refractor of Cambridge University, having been obtained in every case from instrumental readings, and not from micrometric comparisons, are not determined with the full accuracy which the instrument is capable of affording. The mode of observation has been, to bring the object, by *estimation*, to the centre of the field of view, marking the time, and reading the circles for each in succession, and thence deriving their relative positions; a method which, however unpromising it may at first sight appear, affords, with practice, better differences of declination than are easily obtained, with smaller instruments, by the aid of the micrometer, and in high declinations is often decidedly preferable for right-ascension differences. The right ascensions and declinations of the comet were obtained by applying the observed differences to the place of the star of comparison referred to the mean equinox of Jan. 1st, 1847.

Mr. Bond presented for publication a new series of moon culminations, observed at the Cambridge Observatory during the past and present year.

MOON CULMINATIONS,

Observed at Cambridge, Corrected for Instrumental Errors, Clock Error, and Rate.

Date.		Name of Object.	Sidereal Time of Meridian Passage.			Seconds of Tabular A. R.	Diff.	Observer's initial.
			h.	m.	s.	s.	s.	
1846, July	3	☽'s 1st Limb	14	14	56.81			B^2*
	"	ε Bootis	14	38	18.00	18.07	+0.07	"
	"	α^2 Libræ	14	42	25.16	25.28	+0.12	"
	"	β Libræ	15	08	46.86	46.74	—0.12	"
	4	α^2 Libræ	14	42	25.27	25.27	0.00	B^1
	"	☽'s 1st Limb	15	10	36.28			"
	6	ε Bootis	14	37	18.24	18.04	—0.20	"
	"	α^2 Libræ	14	42	25.55	25.26	—0.29	"
	"	β^1 Scorpii	15	56	32.43	33.01	+0.58	"
	"	δ Ophiuchi	16	06	19.99	20.10	+0.11	"
	"	α Scorpii	16	20	02.55	02.37	—0.18	"
	"	☽'s 1st Limb	17	12	29.81			"
	"	D Ophiuchi	17	34	16.65	16.36	—0.29	"
	7	α Bootis	14	08	40.74	40.63	—0.11	"
	"	ε Bootis	14	38	18.14	18.03	—0.11	"
	"	α^2 Libræ	14	42	25.25	25.25	0.00	"
	"	α Scorpii	16	20	02.11	02.37	+0.26	"
	"	φ Ophiuchi	17	11	50.36	50.30	—0.06	"

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* B^1 is the initial of *William C. Bond;* B^2, of *G. P. Bond.*

Date.	Name of Object.	Sidereal Time of Meridian Passage.			Seconds of Tabular A. R.	Diff.	Observer's initial.
		h.	m.	s.	s.	s.	
1846, July 7	D Ophiuchi	17	34	16.18	16.36	+0.18	B^1
"	☽'s 1st Limb	18	17	09.95			"
"	σ Sagittarii	18	45	47.38	47.01	−0.37	"
"	ο Sagittarii	18	55	31.18	31.11	−0.07	"
12	☽'s 2d Limb	23	26	35.60			"
"	ι Piscium	23	32	04.64	04.61	−0.03	"
"	ω Piscium	23	51	26.95	26.99	+0.04	"
"	γ Pegasi	0	05	21.46	21.51	+0.05	"
15	α Arietis	1	58	32.68	32.68	0.00	B^2
"	☽'s 2d Limb	2	05	14.49			"
Aug. 3	Antares	16	20	01.90	02.15	+0.25	"
"	η Ophiuchi	17	01	36.65	36.60	−0.05	"
"	α Herculis	17	07	40.86	40.60	−0.26	"
"	ϑ Ophiuchi	17	12	37.41	37.22	−0.19	"
"	ρ Draconis	17	26	59.75	59.91	+0.16	"
"	D Ophiuchi	17	34	16.14	16.12	−0.02	"
"	☽'s 1st Limb	17	44	33.40			"
"	μ^1 Sagittarii	18	04	37.23	37.24	+0.01	"
"	λ Sagittarii	18	18	31.96	32.18	+0.22	"
4	γ Draconis	17	53	04.47	04.62	+0.15	B^1
"	μ^1 Sagittarii	18	04	37.24	37.23	−0.01	"
"	λ Sagittarii	18	18	32.09	32.17	+0.08	"
"	α Lyræ	18	31	46.68	46.47	−0.21	"
"	☽'s 1st Limb	18	48	41.10			"
"	π Sagittarii	19	00	40.46	40.33	−0.13	"
5	μ^1 Sagittarii	18	04	37.21	37.23	+0.02	B^2
"	α Lyræ	18	31	46.47	46.47	0.00	"
"	π Sagittarii	19	00	39.94	40.33	+0.39	"
"	β Aquilæ	19	47	48.70	48 53	−0.17	"
"	γ Aquilæ	19	38	59.69	59.68	−0.01	"
"	α Aquilæ	19	43	19.82	19.78	−0.04	"
"	☽'s 1st Limb	19	53	12.07			"
"	ε Aquarii	20	39	23.91	24.08	+0.17	"
"	α^2 Capricorni	21	09	34.08	34.24	+0.16	"
12	☽'s 2d Limb	2	47	41.49			B^1
"	α Tauri	4	27	07.98	07.84	−0.14	"
"	Capella	5	05	22.03	22.17	+0.14	"
31	D Ophiuchi	17	34	15.83	15.90	+0.07	B^2
"	γ Draconis	17	53	03.91	03.89	−0.02	"
"	μ^1 Sagittarii	18	04	36.94	36.92	−0.02	"
"	☽'s 1st Limb	18	19	01.60			"
"	σ Sagittarii	18	45	46 88	46.84	−0.04	"
Sept. 4	β Aquarii	21	23	30.80	30.77	−0.03	"
"	β Cephii	21	26	44.40	44.33	−0.07	"
"	ε Pegasi	21	36	41.30	41.18	−0.12	"
"	α Aquarii	21	57	55.99	56.22	+0.23	"
"	ϑ Aquarii	22	08	46.06	46.03	−0.03	"

Date.	Name of Object.	Sidereal Time of Meridian Passage.			Seconds of Tabular A. R.	Diff.	Observer's initial.
		h.	m.	s.	s.	s.	
1846, Sept. 4	☽ 's 1st Limb	22	27	07.83			B^2
"	ζ Pegasi	22	33	51.06	50.94	—0.12	"
"	*q* Piscium	23	53	59.87	59.90	+0.03	"
6	☽ 's 2d Limb	0	28	02.39			"
"	α Cassiopeæ	0	31	53.83	53.94	+0.11	"
"	β Ceti	0	35	55.07	54.97	—0.10	"
"	ε Piscium	0	55	01.34	01.31	—0.03	"
"	*l* Piscium	1	00	30.50	30.41	—0.09	"
7	*l* Piscium	1	00	30.11	30.43	+0.32	"
"	η Piscium	1	23	18.87	18.99	+0.12	"
"	☽ 's 2d Limb	1	21	20.86			"
"	π Piscium	1	29	00.21			"
"	ο Piscium	1	37	19.74	19.66	—0.08	"
"	α Arietis	1	58	34.24	34.22	—0.02	"
"	ξ^1 Ceti	2	04	54.13	54.19	+0.06	"
9	α Ceti	2	54	17.54	17.50	—0.04	"
"	δ Arietis	3	02	54.09	53.48	—0.61	"
"	α Persei	3	13	26.16	26.39	+0.23	"
"	☽ 's 2d Limb	3	21	11.24			"
"	η Tauri	3	38	24.32	24.12	—0.20	"
11	α Tauri	4	28	08.73	08.73	0.00	"
"	Capella	5	06	23.37	23.37	0.00	"
"	☽ 's 2d Limb	5	14	20.25			"
28	μ^1 Sagittarii	18	04	36.56	36.40	—0.16	B^1
"	2125 A. S. Cat.	18	20	28.53	28.31	—0.22	"
"	α Lyræ	18	31	45.05	45.33	+0.28	"
"	☽ 's 1st Limb	18	57	03.09			"
"	β Lyræ	18	44	25.98	25.90	—0.08	"
"	*d* Sagittarii	19	08	40.70	40.81	+0.11	"
"	φ^1 Sagittarii	19	12	47.49	47.81	+0.32	"
29	α Lyræ	18	31	45.28	45.30	+0.02	"
"	β Lyræ	18	44	25.91	25.90	—0.01	"
"	*d* Sagittarii	19	08	40.83	40.79	—0.04	"
"	φ^1 Sagittarii	19	12	47.85	47.79	—0.06	"
"	☽ 's 1st Limb	19	57	29.70			"
30	☽ 's 2d Limb	20	57	39.37			"
"	ζ Pegasi	21	06	26.68	26.50	—0.18	"
"	ε Pegasi	21	36	40.82	41.00	+0.18	"
Oct. 3	β Piscium	22	56	05.97	06.36	+0.39	B^2
"	γ Piscium	23	09	14.53	14.96	+0.43	"
"	γ Cephii	23	33	14.02	14.08	+0.06	"
"	γ Ursæ Maj.	23	45	42.07	42.32	+0.25	"
"	ω Piscium	23	51	28.09	28.28	+0.19	"
"	☽ 's 1st Limb	23	54	59.86			"
"	α Andromedæ	0	00	30.82	30.72	—0.10	"
"	γ Pegasi	0	05	22.81	22.90	+0.09	"
"	*d* Piscium	0	12	44.47	44.84	+0.37	"

Date.	Name of Object.	Sidereal Time of Meridian Passage.			Seconds of Tabular A. R.	Diff.	Observer's initial.
		h.	m.	s.	s.	s.	
1846, Oct. 5	61′ Cygni	21	00	03.60	03.47	—0.13	B^1
"	ζ Cygni	21	06	26.54	26.41	—0.13	"
"	α Cephii	21	14	57.42	57.50	+0.08	"
"	α Andromedæ	0	00	30.85	30.72	—0.13	"
"	γ Pegasi	0	05	22.62	22.91	+0.29	"
"	ε Piscium	0	55	01.42	01.64	+0.22	"
"	☽ ’s 2d Limb	1	54	37.79			"
6	γ Ceti	2	27	51.71	51.98	+0.27	B^2
"	μ^1 Ceti	2	36	41.43	41.34	—0.09	"
"	☽ ’s 2d Limb	2	53	22.73			"
"	δ Arietis	3	02	54.35	54.10	—0.25	"
"	α Persei	3	13	27.45	27.31	—0.14	"
"	ξ Tauri	3	18	53.53	53.79	+0.26	"
"	η Tauri	3	38	24.81	24.85	+0.04	"
7	δ Arietis	3	02	54.42	54.12	—0.30	"
"	α Persei	3	13	27.22	27.34	+0.12	"
"	ξ Tauri	3	18	53.73	53.81	+0.08	"
"	η Tauri	3	38	24.93	24.87	—0.06	"
"	☽ ’s 2d Limb	3	51	49.99			"
"	γ Tauri	4	11	06.16	06.01	—0.15	"
"	α Tauri	4	27	09.23	09.47	+0.24	"
11	ζ Geminorum	6	55	01.95	01.81	—0.14	"
"	δ Geminorum	7	10	58.72	58.62	—0.10	"
"	ϰ Geminorum	7	24	52.15	51.97	—0.18	"
"	☽ ’s 2d Limb	7	32	06.88			"
"	β Geminorum	7	35	56.28	56.38	+0.10	"
13	ε Hydræ	8	38	39.77	39.72	—0.05	B^1
"	α Hydræ	9	20	03.45	03.39	—0.06	"
"	☽ ’s 2d Limb	9	10	49.26			"
"	α Leonis	10	00	12.08	12.18	+0.10	"
29	ι Aquarii	21	58	10.17	10.37	+0.20	"
"	ϑ Aquarii	22	08	45.45	45.59	+0.14	"
"	☽ ’s 1st Limb	22	31	53.36			"
"	λ Aquarii	22	44	38.48	38.33	—0.15	"
"	ϑ Aquarii	23	06	24.55	24.54	—0.01	"
"	α Pegasi	22	57	09.54	09.36	—0.18	"
"	α Andromedæ	0	00	30.81	30.66	—0.15	"
"	γ Pegasi	0	05	22.48	22.84	+0.36	"
Dec. 11	η Virginis	12	12	04.60	04.67	+0.07	"
"	☽ ’s 2d Limb	12	26	27.15			"
"	γ^1 Virginis	12	33	53.88			"
13	α Virginis	13	17	08.20	08.16	—0.04	"
"	☽ ’s 2d Limb	14	05	12.30			"
23	☽ ’s 1st Limb	22	53	32.08			"
"	λ Piscium	23	34	14.53	14.94	+0.41	"
"	ω Piscium	23	51	27.56	27.61	+0.05	"
"	γ Pegasi	0	05	22.25	22.29	+0.04	"

Date.	Name of Object.	Sidereal Time of Meridian Passage.			Seconds of Tabular A. R.	Diff.	Observer's Initial.
		h.	m.	s.	s.	s.	
1846, Dec. 23	*d* Piscium	0	12	44.42	44.27	—0.15	B^1
26	α Pegasi	22	57	08.74	08.62	—0.12	“
“	γ Pegasi	0	05	22.36	22.25	—0.11	“
“	μ Piscium	1	22	11.42	10.98	—0.44	“
“	☽'s 1st Limb	1	39	18.62			“
30	α Tauri	4	27	10.84	10.61	—0.23	“
“	ι Tauri	4	53	59.09	59.12	+0.03	“
“	β Tauri	5	16	40.08	39.50	—0.58	“
“	α Orionis	5	46	55.11	55.24	+0.13	“
“	☽'s 1st Limb	5	24	58.19			“
“	ζ Tauri	5	23	32.09	32.08	+0.01	“
“	χ^5 Orionis	5	54	51.85	52.00	+0.15	“
1847, Jan. 5	π Leonis	9	52	09.08	09.02	—0.06	“
“	α Leonis	10	00	14.67	14.70	+0.03	“
“	☽'s 2d Limb	10	35	08.46			“
“	*d* Leonis	10	52	40.68	40.67	—0.01	“
“	χ Leonis	10	57	08.38	08.32	—0.06	“
22	☽'s 1st Limb	1	22	36.46			“
“	α Arietis	1	58	34.36	34.48	+0.12	“
23	η Piscium	1	23	19.02	18.84	—0.18	B^2
“	γ^1 Arietis	1	45	09.52	09.31	—0.21	“
“	α Arietis	1	58	34.47	34.46	—0.01	“
“	☽'s 1st Limb	2	16	36.11			“
“	γ Ceti	2	35	23.66	23.62	—0.04	“
25	ξ Tauri	3	18	53.86	54.12	+0.26	B^1
“	η Tauri	3	38	25.50	25.40	—0.10	“
“	λ Tauri	3	52	14.07	13.91	—0.16	“
“	☽'s 1st Limb	4	10	51.89			“
“	α Tauri	4	27	10.29	10.43	+0.14	“
27	ζ Tauri	5	28	32.00	32.02	+0.02	“
“	☽'s 1st Limb	6	02	12.94			“
“	γ Geminorum	6	29	54.32	54.23	—0.09	“
28	μ Geminorum	6	13	44.16	44.27	+0.11	“
“	γ Geminorum	6	28	54.18	54.22	+0.04	“
“	☽'s 1st Limb	6	56	21.77			“
“	δ Geminorum	7	11	00.95	01.01	+0.06	“
“	ϰ Geminorum	7	24	54.28	54.37	+0.09	“

Moon Culminations,

Observed at Cambridge Observatory, corrected for Collimation, Level, and Azimuthal Deviations of the Transit Instrument, and for Clock Rate and Error on Sidereal Time.

Date.	Name of Object.	Sidereal Time of Meridian Passage.			Seconds of Tabular A. R.	Diff.	Observer's initial.
		h.	m.	s.	s.	s.	
1847, Jan. 31	ϰ Cancri	8	59	29.52	29.31	—0.21	B^2
"	α Hydræ	9	20	06.28	06.20	—0.08	"
"	☽'s 2d Limb	9	30	42.49			"
"	ο Leonis	9	33	00.85	01.00	+0.15	"
"	ε Leonis	9	37	11.64	11.53	—0.11	"
"	α Leonis	10	00	15.22	15.21	—0.01	"
Feb. 8	☽'s 2d Limb	15	58	22.74			B^1
"	δ Ophiuchi	16	06	20.51	20.47	—0.04	"
"	Antares	16	20	02.70	02.77	+0.07	"
23	γ Tauri	4	11	06.74	06.38	—0.36	"
"	α Tauri	4	27	10.02	10.01	—0.01	"
"	ι Tauri	4	53	58.65	58.58	—0.07	"
"	Capella	5	05	25.72	25.58	—0.14	"
"	ζ Tauri	5	28	31.85	31.67	—0.18	"
"	☽'s 1st Limb	5	45	21.87			"
"	η Geminorum	6	05	40.13	40.35	+0.22	"
"	ζ Geminorum	6	13	43.83	43.99	+0.16	"
24	Capella	5	05	25.52	25.55	+0.03	"
"	β Orionis	5	07	12.30	12.36	+0.06	"
"	β Tauri	5	16	38.91	38.98	+0.07	"
"	δ Orionis	5	24	12.68	12.76	+0.08	"
"	ε Orionis	5	28	28.30	28.39	+0.09	"
"	η Geminorum	6	05	40.01	40.33	+0.32	"
"	μ Geminorum	6	13	44.12	43.96	—0.16	"
"	☽'s 1st Limb	6	39	42.76			"
"	ζ Geminorum	6	55	03.63	03.83	+0.20	"
"	δ Geminorum	7	11	00.90	00.83	—0.07	"
25	δ Geminorum	7	11	00.60	00.82	+0.22	"
"	α^2 Geminorum	7	24	52.33	52.02	—0.31	"
"	☽'s 1st Limb	7	32	23.56			"
"	β Geminorum	7	35	59.06	58.90	—0.16	"
"	φ Geminorum	7	44	09.45	09.80	+0.35	"
26	ζ Geminorum	6	55	04.00	03.81	—0.19	"
"	δ Geminorum	7	11	00.81	00.80	—0.01	"
"	α^2 Geminorum	7	24	52.02	52.00	—0.02	"
"	ϰ Geminorum	7	35	14.29	14.25	—0.04	"
"	☽'s 1st Limb	8	23	17.19			"
March 2	δ Leonis	11	05	59.90	59.89	—0.01	B^2
"	σ Leonis	11	13	16.67	17.02	+0.35	"
"	τ Leonis	11	20	06.03	06.33	+0.30	"
"	☽'s 2d Limb	11	35	27.44			"

Date.	Name of Object.	Sidereal Time of Meridian Passage.			Seconds of Tabular A. R.	Diff.	Observer's Initial.
		h.	m.	s.	s.	s.	
1847, March 2	ν Virginis	11	38	01.62	01.82	+ 0.20	B^2
“	β Leonis	11	41	17.14	17.18	+ 0.04	“
“	β Virginis	11	42	45.58	45.91	+ 0.33	“
24	ζ Geminorum	6	55	03.28	03.35	+ 0.07	B^1
“	δ Geminorum	7	11	00.34	00.37	+ 0.03	“
“	☽'s 1st Limb	7	15	07.04			“
“	k Geminorum	7	24	53.82	53.79	— 0.03	“
“	ϰ Geminorum	7	35	13.89	13.84	— 0.05	“
“	Procyon	7	31	18.81	18.84	+ 0.03	“
25	α Orionis	5	46	54.33	54.37	+ 0.04	“
“	μ Geminorum	6	13	43.32	43.44	+ 0.12	“
“	k Geminorum	7	24	53.79	53.77	— 0.02	“
“	Procyon	7	31	18.82	18.83	+ 0.01	“
“	ϰ Geminorum	7	35	13.99	13.82	— 0.17	“
“	☽'s 1st Limb	8	06	49.81			“
“	ϑ Cancri	8	22	53.94	53.74	— 0.20	“
“	δ Cancri	8	36	00.86	00.82	— 0.04	“
April 24	α Hydræ	9	20	05.60	05.66	+ 0.06	“
“	o Leonis	9	33	00.58	00 57	— 0.01	“
“	α Leonis	10	00	14.89	14.97	+ 0.08	“
“	☽'s 1st Limb	10	15	11.72			“
“	ϱ Leonis	10	24	46.84	46.90	+ 0.06	“
27	π Virginis	11	53	04.08	04.13	+ 0.05	B^2
“	η Virginis	12	12	06.98	06.98	0.00	“
“	☽'s 1st Limb	12	34	39.08			“
“	δ Virginis	12	47	56.19	55.99	— 0.20	“
“	ϑ Virginis	13	02	04.49	04.63	+ 0.14	“
“	α Virginis	13	17	10.80	10.97	+ 0.17	“
28	α Virginis	13	17	11.00	10.98	— 0.02	B^1
“	☽'s 1st Limb	13	22	21.17			“
“	ζ Virginis	13	26	56.78	56.87	+ 0.09	“
May 6	α Cygni	20	36	14.58	14.65	+ 0.07	“
“	☽'s 2d Limb	20	43	41.48			“
“	ε Pegasi	21	36	41.63	41.55	— 0.08	“
25	☽'s 1st Limb	13	03	50.68			“
“	61 Virginis	13	10	27.63	27.36	— 0.27	“
“	α Virginis	13	17	10.89	10.92	+ 0.03	“
“	η Bootis	13	47	25.99	26.26	+ 0.27	“
“	α Bootis	14	08	43.58	43.39	— 0.19	“
26	61 Virginis	13	10	27.44	27.36	— 0.08	“
“	α Virginis	13	17	10.86	10.92	+ 0.06	“
“	☽'s 1st Limb	13	52	25.21			“
“	ϰ Virginis	14	04	47.30	47.24	— 0.06	“
27	ϰ Virginis	14	04	47.36	47.24	— 0.12	B^2
“	λ Virginis	14	10	53.27	53.34	+ 0.07	“
“	☽'s 1st Limb	14	43	00.33			“
June 21	☽'s 1st Limb	12	44	47.38			“

Date.	Name of Object.	Sidereal Time of Meridian Passage.			Seconds of Tabular A. R.	Diff.	Observer's Initial.
		h.	m.	s.	s.		
1847, June 21	α Virginis	13	17	10.65	10.72	+ 0.07	B^1
“	η Bootis	13	47	26.07	26.06	— 0.01	“
July 1	ζ Pegasi	22	33	52.55	52.53	— 0.02	“
“	Fomalhaut	22	49	13.14	13.15	+ 0.01	“
“	α Pegasi	22	57	10.93	11.07	+ 0.14	“
“	☽'s 2d Limb	22	02	59.72			“
“	ϑ Aquarii	22	08	47.99	47.87	— 0.12	“
“	γ Aquarii	22	13	47.69	47.30	— 0.39	“
“	σ Aquarii	22	22	35.27	35.36	+ 0.09	“
“	λ Aquarii	22	44	40.22	40.25	+ 0.03	“
21	α^2 Libræ	14	42	28.04	28.07	+ 0.03	“
“	☽'s 1st Limb	14	50	54.57			“
23	α Serpentis	15	36	46.60	46.50	— 0.10	“
“	β^1 Scorpii	15	56	35.89	36.00	+ 0.11	“
“	α Scorpii	16	20	05.50	05.55	+ 0.05	“
“	☽'s 1st Limb	16	38	08.95			“
“	η Ophiuchi	17	01	39.70	39.75	+ 0.05	“
“	ϑ Ophiuchi	17	12	40.32	40.59	+ 0.27	“
24	η Ophiuchi	17	01	39.62	39.75	+ 0.13	“
“	α Herculis	17	07	43.09	43.14	+ 0.05	“
“	ϑ Ophiuchi	17	12	40.51	40.58	+ 0.07	“
“	☽'s 1st Limb	17	45	44.46			“
27	α^2 Capricorni	20	09	37.23	37.16	— 0.07	“
“	β Capricorni	20	12	27.93	28.18	+ 0.25	“
“	☽'s 1st Limb	20	37	13.05			“
“	☽'s 2d Limb	20	39	23.08			“
“	μ Aquarii	20	44	27.42	27.31	— 0.11	“
Aug. 20	☽'s 1st Limb	17	09	11.15			“
“	o Serpentis	17	32	51.97	52.15	+ 0.18	“
“	μ^1 Sagittarii	18	04	40.23	40.28	+ 0.05	“
21	4 Sagittarii	17	50	29.92			“
“	☽'s 1st Limb	18	06	40.02			“
“	ϱ^1 Sagittarii	19	12	51.07	51.47	+ 0.40	“
“	e^2 Sagittarii	19	33	49.29	49.42	+ 0.13	“
24	ζ Aquilæ	19	58	25.69	25.72	+ 0.03	“
“	δ Aquilæ	19	17	50.34	50.10	— 0.24	“
“	γ Aquilæ	19	39	02.23	02.34	+ 0.11	“
“	α Aquilæ	19	43	22.10	22.31	+ 0.21	“
“	β Aquilæ	19	47	51.20	51.09	— 0.11	“
“	☽'s 1st Limb	21	07	18.00			“
“	β Aquarii	21	23	33.37	33.58	+ 0.21	“
“	γ Capricorni	21	31	39.51	39.98	+ 0.47	“
“	μ Capricorni	21	45	00.29	00.29	0.00	“

Mr. Everett read a short paper on the number of primary planets belonging to our system which might be supposed to remain as yet undiscovered.

He stated that he had been "led more particularly to the inquiry by the striking remark of M. Leverrier (in the *Compte Rendu* for 5th October, 1846, p. 659) to this effect,—'that we may hope that, after thirty or forty years of observations of the new planet, we shall be able to use it, in its turn, for the discovery of that which follows it, in the order of distances from the sun. *And so on.* Unhappily we shall soon fall upon stars, invisible in consequence of their immense distance from the sun, but whose orbits eventually, in the lapse of ages, will be traced with great exactness by means of the theory of secular inequalities.' All calculations of this kind must, of course, take for granted that the law of gravitation exists and operates in the remote parts of the system as it does within the reach of our observations. The star 61 Cygni is usually regarded as the fixed star nearest to us, and this is placed by Bessel at the distance of 62,481,500,000,000 miles. Adopting the only supposition that we are able to make on this subject, viz., that our sun and the stars are bodies of equal size and density, we may conclude that the attraction of the sun extends over half the interval between the sun and 61 Cygni, that is, over a space of 31,240,750,000,000 miles. The law of the distances from the sun at which the planets succeed each other in our system is not known; but assuming Bode's law, or, still more simply, a geometrical progression, as that which comes near the truth in reference to all the known planets except the last discovered (regarding the asteroids as one planetary system), and we should have room for ten new planets, and nearly the eleventh, outside the orbit of Neptune."

Mr. Everett also read a letter from Professor Owen, of London, containing an approving notice of Dr. Meigs's paper on the generation of the opossum, and expressing a strong desire to receive, in behalf of the Hunterian Museum, specimens of the impregnated uterus of this animal, preserved in spirits.

"Female opossums killed between the 18th of February and the 6th of March would be likely to afford such specimens,—of which not one exists in the museums of London, nor, I believe, in Europe. The value of the specimen would be enhanced, if any of your young anatomists would, previously to immersing the animal in spirits, inject the abdominal aorta with size or gelatine, colored by vermilion.

" There is only one expression in Dr. Meigs's memoir in which I am not disposed to acquiesce, where he says 'it is not to be believed that a breathing, &c., mammifer can be developed independently of a placenta' (p. 329). I have met with so many unexpected exceptions to assumed general rules in the animal economy, so many proofs that the Creator operates by ways diversified infinitely beyond human calculation, as to adopt no scientific dogma whilst any means of testing it by observation remain untried. It would be most desirable that the female opossum should be sought for at the period shown by Dr. Meigs to be that when she would be most likely to have embryos in the uterus, and the nature of the connection between the mother and offspring be examined. A placenta may be defined as a vascular, villous, or cellular process from the outer surface of the chorion, interlacing with a similar process from the inner surface of the womb, and producing an adhesion of the chorion thereto difficult to be overcome, and often not without laceration. The presence of such an organ, simple or subdivided, would be easily determined in an opossum killed towards the latter period of her brief pregnancy, say from March 1st to 7th. The analogy between the condition of the new-born young in the kangaroo, in which no placenta is formed, and the opossum is so close, that, if I were to allow myself to anticipate what unbiased observation ought to decide, I should expect as close an analogy in the condition of the fœtal membranes and appendages."

Mr. Teschemacher exhibited some specimens of anthracite coal, containing what he supposed to be fossil seeds, as he had carefully decarbonized the internal substance of them, and by the assistance of the Oberhausser microscope belonging to Professor Agassiz, with a power of 700 diameters, had found it to be a mass of distinct cells. Some of these seeds were surrounded by impressions resembling spinous processes, which were uniform and symmetrical. He also stated, that lately discovered specimens had confirmed him in his opinion, that most of the appearances usually called *slickensides* in the anthracite coal were the external parts of large fossil plants; also, that the small, uniform striæ frequent in the coal, and which are sometimes found covering pieces of a conical form, are the impressions of the vessels of vegetables, and were not caused by the action of sliding in the veins; he thought that no accidental sliding could produce such uniform marks on numerous specimens from various mines.

Mr. Teschemacher also exhibited some rhizomorphæ, found in the old chambers of coal-mines.

Professor Agassiz called the attention of the Academy to the importance of a complete investigation of the anatomy, the mode of life, and the embryology of the blind-fish of the Mammoth Cave (*Amblyopsis spelæus*). He thought there was an opportunity to settle, by actual experiment, the extent of physical influences in causing organized beings to assume their peculiar and distinctive characteristics in relation to the media in which they live. He doubted not that important inferences could be derived from these investigations with reference to the question, whether species have been created in the localities they inhabit and with special adaptation to the external circumstances in which they were first introduced, or whether these circumstances were acting as modifying influences upon fewer primitive types, which would thus be diversified and produce the successive changes evinced in the geological series. The experiments he would suggest are, first, an accurate and complete anatomical investigation, sufficiently minute to enable the observer to perceive the slightest changes which would occur; secondly, observations upon individuals of different ages brought to the light and kept for a long time, even through a series of successive generations, in these new circumstances; thirdly, a complete series of comparative embryonic investigations with recently laid ova, traced simultaneously in the dark and under the influence of moderate and of intense light, keeping especially in view the formation of the nervous system, and particularly that of the eyes. If there is an eye formed in the dark, ascertain when and how it disappears, as it is entirely wanting in the full-grown individuals, and again notice the differences in this respect between specimens growing under the influence of light.

DONATIONS TO THE LIBRARY,

FROM MAY TO NOVEMBER, 1847.

Proceedings of the Providence Franklin Society. No. 2. April, 1847. From the Society.

Silliman's American Journal of Science, for May, July, and Sept. From the Editors.

Alfred Smee. The Potato Plant, its Uses and Properties, together with the Cause of the present Malady. 8vo. London, 1846. From the Author.

Philosophical Transactions of the Royal Society of London. Part 4, for 1846. From the Royal Society.

Proceedings of the Royal Society. No. 66. From the Same.

Astronomical Observations made at Greenwich Observatory in 1844. 4to. London, 1846. From the Same.

Magnetical and Meteorological Observations made at Greenwich Observatory in 1844. 4to. From the Same.

Transactions of the Royal Irish Academy. Vol. XXI., Part 1. 4to. Dublin, 1846. Also, Proceedings. Vol. III., Parts 1 and 2. From the R. I. Academy.

Proceedings of the American Philosophical Society. Vol. IV., Nos. 36 - 38. From the Society.

Sir R. I. Murchison. Silurian Rocks, and their Associates, in Parts of Sweden. 8vo. pamph. London, 1847. From the Author.

Biot. Instructions Pratiques sur l'Observation et de la Mesure des Propriétés Optiques appellées Rotatoires. 4to. pamph. Paris, 1845. From the Author.

Proceedings of the Academy of Natural Sciences. Philadelphia. Vol. III., Nos. 8 - 10. From the Academy.

J. D. Dana. On the Origin of Continents. — Volcanoes of the Moon. — Geological Results of the Earth's Contraction. — Origin of the Grand Outline Features of the Earth. 8vo. pamphlets. (Extr. from Sill. Jour.) From the Author.

C. L. Bonaparte. Catalogo Metodico da Pesci Europei. 4to. pamph. Napoli, 1846. From the Author.

List of the Osteological Specimens in the British Museum. 18mo. London. From the British Museum.

Mémoires de l'Académie Royale des Sciences, Morales et Politiques, de l'Institut de France. Tom. I., II., 2^me^ Ser. 1837 - 9. Tom. III. 1841. 4to. Paris. From the Institute.

Annals of the Lyceum of Natural History, New York. Vol. IV., Nos. 10, 11. 8vo. 1847. From the Lyceum.

Flora, oder Allgemeine Bot. Zeitung. 7 Nos. 8vo. 1843-46. From the Bot. Society of Ratisbon.

Magnetische und Meterologische Beobachtungen zu Präg. 6-7ter Jahrg. 1845-6. 4to. Prague, 1846-7. From the Observatory of Prague.

Karl Kriel. Magnetische und Geographische Ortbestimmungen in Böhmen, Jahren 1843-5. 4to. Prague, 1846. From the Author.

Abhandlungen der Historischen Classe der Königl. Bayerschen Akademie der Wissenschaften zu München. Band IV., t. 3. 1846. — Abhand. der Philos.-Philolog. Cl. Band IV., t. 3. 1847. 4to. From the Royal Bavarian Academy.

Lasaulx. Ueber das Studium der Griechischen und Romischen Alterthümer. 4to. pamph. München, 1846. From the Author.

James P. Espy. Report on Meteorology to the Surgeon-General. 4to. pamph. Washington, 1843. From the Author.

Annual Reports of the Regents of the University of the State of New York, from 1846 to 1837 inclusive. 8vo. From the Regents.

Journal of the American Oriental Society. Vol. I., Part 3. 8vo. 1847. From the Society.

Sir John F. W. Herschel. Results of Astronomical Observations made during the Years 1834-8, at the Cape of Good Hope. 4to. London, 1847. From the Duke of Northumberland, by the Author.

Report of the Sixteenth Meeting of the British Association for the Advancement of Science, held at Southampton in 1846. 8vo. London, 1847. From the Association.

Two Hundred and ninety-ninth Meeting.

November 2, 1847. — MONTHLY MEETING.

The PRESIDENT in the chair.

Letters were read from the Rev. Dr. Whewell, and John C. Adams, Esq., of Cambridge University, in acknowledgment of their election as Foreign Honorary Members of the Academy; also from Professor Edward Robinson, of New York, as a Corresponding Member.

Mr. Bond communicated his observations, made at the Ob-